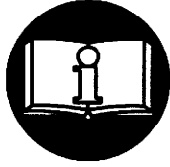


MODELS 150BMPD88R54-3335 and 150BMPD88L54-3336 AIR STARTERS



▲ WARNING

**IMPORTANT SAFETY INFORMATION ENCLOSED.
READ THIS MANUAL BEFORE OPERATING STARTER.**

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

- For safety, top performance, and maximum durability of parts, do not operate Series 150BMP Starters at air pressures over the pressure rating stamped on the nameplate. Use supply lines of adequate size as directed in the installation instructions in this manual.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this starter, or before performing any maintenance on this starter.
- Operate Series 150BMP Starters on compressed air only. They are not designed or sealed for operation on compressed gas.
- After assembling a starter, always test it in accordance with the procedures outlined in this manual. Never install a reassembled starter that has not been tested in accordance with the procedures in this manual.
- Do not lubricate starters with flammable or volatile liquids such as kerosene or jet fuel.
- Operate this starter only when properly installed on the engine.
- Do not remove any labels. Replace any damaged label.
- Use accessories recommended by Ingersoll-Rand.

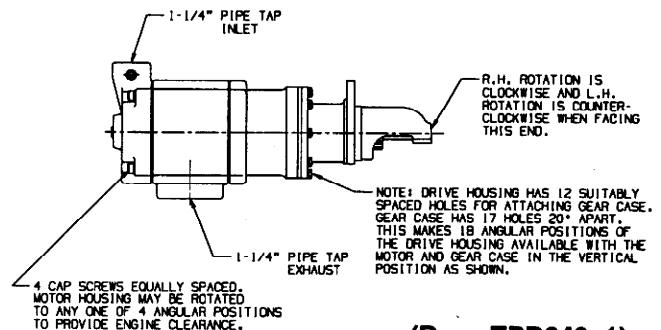
LUBRICATION

For temperatures above 32° F (0° C), use a good quality SAE 10 non-detergent motor oil.

For temperatures below 32° F (0° C), use diesel fuel. We recommend the use of an Ingersoll-Rand No. HDL2 lubricator which is designed for air or gas driven starters. Use of this lubricator will help to eliminate costly downtime caused by lubrication neglect.

STARTER REORIENTATION

Starters can be assembled in different angular positions to provide a variety of locations for the inlet, exhaust and mounting flange holes. Reorient only if necessary to mount the starter to the engine or connect air lines to the starter.



(Dwg. TPD649-1)

NOTICE

The use of other than genuine Ingersoll-Rand replacement parts may result in safety hazards, decreased starter performance and increased maintenance, and may invalidate all warranties.

Ingersoll-Rand is not responsible for customer modification of starters for applications on which Ingersoll-Rand was not consulted.

Repairs should be made only by authorized, trained personnel. Consult your nearest Ingersoll-Rand Authorized Servicerenter.

It is the responsibility of the employer to place the information in this manual into the hands of the operator.

Refer All Communications to the Nearest
Ingersoll-Rand Office or Distributor.

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INGERSOLL-RAND®
ENGINE STARTING SYSTEMS

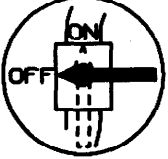
WARNING LABEL IDENTIFICATION




FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

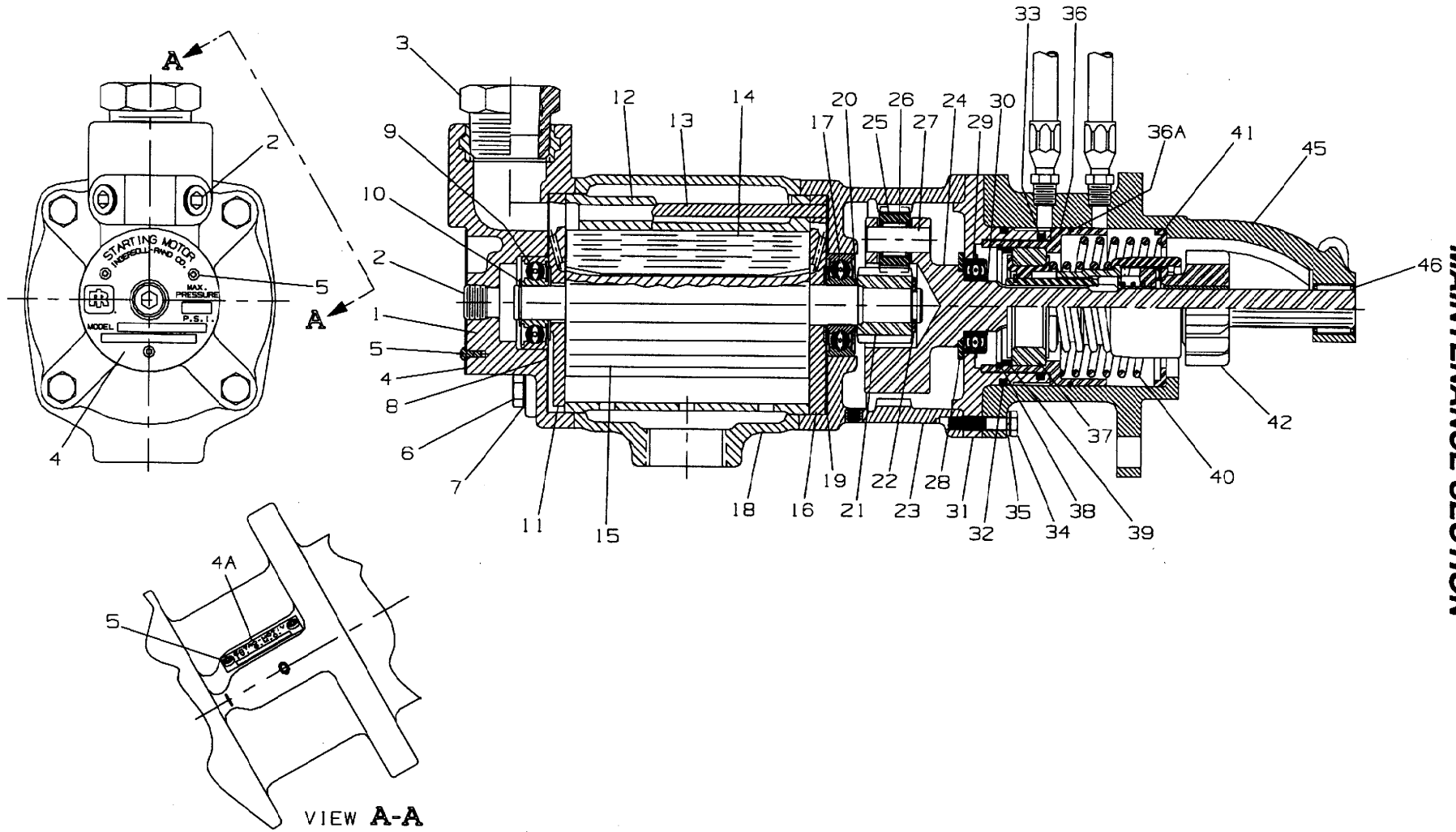
| | |
|---|--|
|  | WARNING |
| | Always wear eye protection when operating or performing maintenance on this starter. |

| | |
|--|---|
|  | WARNING |
| | Always wear hearing protection when operating this starter. |

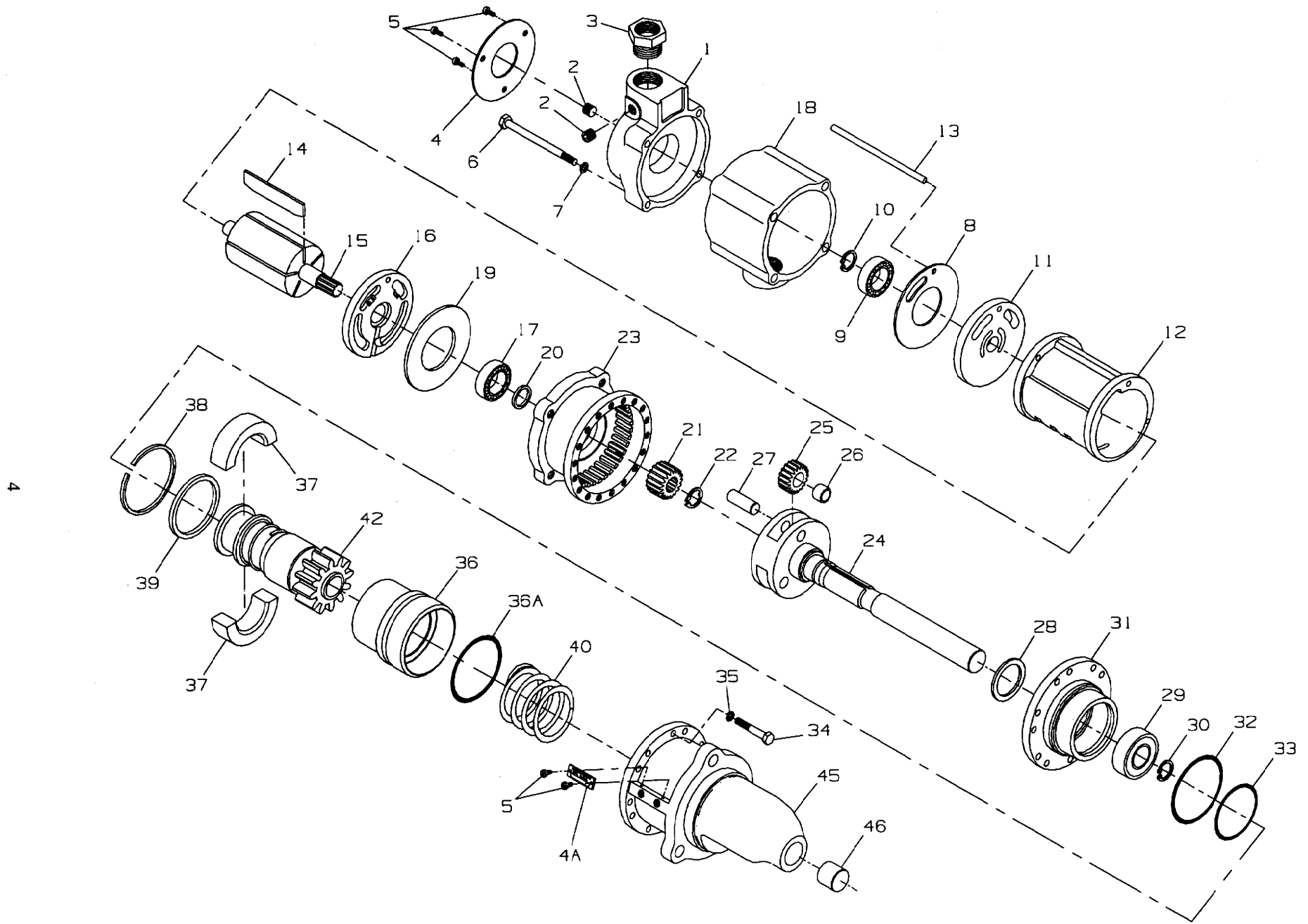
| | |
|---|---|
|  | WARNING |
| | Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this starter, or before performing any maintenance on this starter. |

| | |
|--|--|
|  | WARNING |
| | Do not use damaged, frayed or deteriorated air hoses and fittings. |

3



MAINTENANCE SECTION



(Dwg. TPA1405)

PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

| | | | | | |
|------|---|---------------|-------|---|---------------|
| 1 | Motor Housing Cover Assembly (1-1/4") | 150BMP-A102A | 30 | Planet Gear Frame Retaining Ring | C6H20A-6 |
| 2 | Lubricator Port Plug (3) | HSPPS-3 | 31 | Gear Case Cover Assembly | 101BMP-A378-2 |
| 3 | Bushing | SS350-B2016 | ◆ 32 | Gear Case Cover Seal | 150BMP-607 |
| 4 | Nameplate | 150BM-301 | ◆ 33 | Piston Seal | 150BMP-604 |
| 4A | Nameplate | VSM-962 | 34 | Drive Housing Cap Screw (12) | 10BM-744 |
| 5 | Nameplate Screw (5) | R4K-302 | 35 | Drive Housing Cap Screw | |
| 6 | Motor Housing Cover Cap Screw (4) | 107-25 | | Lock Washer (12) | 10BM-67 |
| 7 | Cover Cap Screw Lock Washer (4) | D02-504 | 36 | Piston Assembly | 150BMP-703 |
| ◆ 8 | Motor Housing Cover Gasket | 150LF-283 | ◆ 36A | O-Ring | 150BMP-337 |
| ◆ 9 | Rear Rotor Bearing | R3H-24 | 37 | Shift Ring (two halves) | 101BMP-705-1 |
| ◆ 10 | Rear Rotor Bearing Retainer | G57-729 | 38 | Shift Ring Retainer | 10BM-606 |
| 11 | Rear End Plate | 10BM-12 | 39 | Shift Ring Spacer | 10BM-602 |
| 12 | Cylinder | 150BM-3 | 40 | Piston Return Spring | 101BMP-700-1 |
| 13 | Cylinder Dowel | 10BM-98 | 42 | Starter Drive | |
| ◆ 14 | Vane Packet (set of 5 Vanes) | 10BM-42-5 | | for Model D88R54 | 101BMP-299-1 |
| 15 | Rotor | 10BMP-53 | | for Model D88L54 | 101BMP-299-2 |
| 16 | Front End Plate | 10BM-11 | 45 | Drive Housing Assembly | 150BMP-300-88 |
| 17 | Front Rotor Bearing | S12-218 | ◆ 46 | Drive Housing Bearing | ML50K-318 |
| 18 | Motor Housing | 10BM-40 | * | Air Strainer Assembly | K4U-A267AT |
| ◆ 19 | Gear Case Gasket | 150LF-284 | * | Air Strainer Cap | K4U-286AT |
| 20 | Rotor Pinion Spacer | 101BMPD-753 | * | Air Strainer Plug | 22SR-165 |
| 21 | Rotor Pinion | 101BMPD-17 | * | Air Strainer Screen | K4U-61AT |
| ◆ 22 | Rotor Pinion Retainer | 10BM-69 | * | Air Strainer Nipple | |
| 23 | Gear Case | 101BMPD-37 | | (1-1/4" x 2-1/2") | SS350-HN20 |
| 24 | Planet Gear Frame | 101BMPD-367-1 | * | Road Splash Deflector Assembly | 150BM-A735 |
| 25 | Planet Gear Assembly (3) | 101BMPD-A10 | * | Muffler Assembly | 150BM-A674 |
| 26 | Planet Gear Bearing (3) | D01-243 | * | Tune-up Kit (includes illustrated parts 8, 9, | |
| 27 | Planet Gear Shaft (3) | 101BMPD-191 | | 10, 14, 19, 22, 32, 33, 36A and 46) | 150BM-TK2 |
| 28 | Planet Gear Frame Thrust Ring | R3H-511 | | | |
| 29 | Planet Gear Frame Bearing | 101BMPD-510 | | | |

* Not illustrated.

◆ Indicates Tune-up Kit part.

NOTES

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